INDEX.

Notes upon Passing Events.

Abolition of Purchase in the Army, 462
Above-Ground and Under-Ground Metropolitan Railways and the Tramways, 461
Adulteration of Food, Drink, and Drugs, Dr. Letheby's Paper on the Legislative Measures for Preventing the, 214
Agricultural Implement Show, The Cattle and, 922
Agricultural Labour, 858
Albert Hall of Art and Science, Opening of the, 262
Alexandra Park Scheme, Collapse of the, 858
Alexandra Park Tontine, The, 647
Amalgamation of the Board of Health and the Poor Law Board, 538, 647
Amalgamations of Railways, 719, 791
American Luggage Despatch System, The, 461
American Trip, Mr. T. Hughes's, 461
Another Bridge wanted over the Thames, 610
Army, Abolition of Purchase in the, 462
Army Commission Purchase System, The, 213
Army Reform, 143
Asphalte and Granite Pavements, Mr. Haywood's Report on the Relative Merits of, 826
Asphalte Pavements, 385
Asphalte, The Val de Travers, 72
Ayrton, Mr., and the London Builders, 40
Barry's, Mr. E., Plans for Rearranging the House of Commons and Improving Hamilton Place, 386
Bazalgette, Mr., Tardy Recognition of the Honours due to, 609
Block around St. Paul's, The, 8
Board of Health and the Poor Law Board, Amalgamation of the, 538
Boxing Day, 8
Bridge wanted over the Thames, Another, 610
Bruce, Mr. Secretary, and the London Corporation, 857
Builders, Mr. Ayrton and the London, 40
Building Act, The Metropolitan, 890
Bureaucrats of the Woods and Forests, The, 501
Burgoyne, Field-Marshal Sir John, The late, 789
Candlish's, Mr., Motion for Paying Off the National Debt, 179
Cattle and Agricultural Implement Show, The, 922
Census of 1871, The, 645
Chadwick's, Mr. Edwin, Self-Glorification, 681
Chancellor of the Exchequer at the Dinner of the Civil Engineers, The, 350
Charing Cross, The New Projects for Connecting the Eastern and Midland Stations with, 40
Charities Bill, The Government, 386
Charity Commissioners, The Endowed Schools and the, 462
Charlier Horse-Shoe, The, 462
Chelsea Embankment, The, 609
Christmas Charities, 890
City Charities, The, 610
City Corporation Markets, The, 263
City Hospitality, 503
City of London Volunteers, The, 71
City Railway Projects, The, 142
City Waste Lands, The, 461
Collapse of the Alexandra Park Scheme, 858
College for Training Civil Engineers for India, Proposed Establishment of a, 178
Colonial Congress, The, 574
Commission, The Endowed Schools, 502
Communications through St. James's and the Green Parks, 215
Conservation of Epping Forest, 573
Constitutional System on its Trial, Our, 350
Corporation of London and Endowed Charities, 538
Corporation of the City of London, The Shortcomings of the, 71
Court of Hustings Bill, The, 263
Courts of Justice, The New, 682
Cruelty to Factory Hands in Lancashire, 104
Death of Sir John Herschel, 385
Denison, Sir William, The late, 72
Denton, Bailey, on Sewage, 922
Denton, Bailey, on the Sanitary Improvement of Rome, and on the Selection of Land for Sewage Irrigation, 72
Derby, Lord, on our National Defences, 40
Despotism in Principle, 104
Difficulties of Neutrality, The, 8
Difficulties, Our Snow, 39
Dinner of the Civil Engineers, The Chancellor of the Exchequer at the, 350
Dixon, Mr. Hepworth, at the Metropolitan School Board, 103
Domestic Economy and the Metropolitan School Board, 538
Dover to Calais, The Scheme for Tunnelling from, 890
Duties of the Post-Office, The, 104
East Indian Engineering College Job, The, 41
Edinburgh Reports on the Utilization of Sewage, The, 683
Edinburgh Water Supply, 574
Educational Board, The Metropolitan, 142, 179
Endowed Charities, The Corporation of London and, 538
Endowed Schools and Charity Commissioners, The, 462
Endowed Schools Commissioners, Projects of the, 263
Endowed Schools Commission, The, 502
Endowed Schools, Lord Lyttelton and the, 610
English and Continental Journalism, 310
English Form of Government, The International on the, 791
English Shortcomings, A French Lady on, 7
Epping Forest, The Conservation of, 573
Examination of Engineers for the East India Public Service, 611
Exhibition of 1871, Opening of the International, 349
Extension of Street Tramways in the Metropolis, 825
Factory Hands in Lancashire, Cruelty to, 104
Failure of the Land Transfer Act, 214
Fever in the Palace, Typhoid, 921
Financial Mania, Renewal of the, 682
French Lady on English Shortcomings, A, 7
French Packet Service, The, 826
French View of Rural Life in England, A, 921
Future of Hampstead Heath, The, 922
Game Bill, Mr. P. A. Taylor's, 311
Gold Coinage, Reform in the, 71
Good Fortune of Italy, The, 7
Government Bill for Regulating the Metropolitan Water Supply, The, 141
Government Charities Bill, The, 386
Government Local Taxation and Licensing Bills, The, 261
Granite and Asphalte Pavements, Mr. Haywood's Report on the Relative Merits of, 826
Guano, 105
Hamilton Place Exit from Park Lane, Opening of the, 462
Hamilton Place, Mr. E. Barry's Plan for Improving, 386
Hampstead Heath and Wimbledon Common, 142
Hampstead Heath, The Future of, 922
Hampstead Small-Pox Hospital Inquiry, The, 791
Harness, Rev. W., The late, 890
Haywood's, Mr., Report on the Relative Merits of Granite and Asphalte Pavements, 826
Herschel, Sir John, Death of, 385
Horse-Shoe, The Charlier, 462
House of Commons, Mr. E. Barry's Plan for Rearranging the, 386
Hughes's, Mr. T., American Trip, 461
Indian Public Service, Examination of Engineers for the, 611
India, Proposed Establishment of a College for Training Civil Engineers for, 178
International on the English Form of Government, The, 791
Italy, The Good Fortune of, 7
Journalism, English and Continental, 310
Kelly Trial, The, 858
Labour, Agricultural, 858
Lambeth Palace, The Waste Ground around, 610
Land Transfer Act, Failure of the, 214
Leeds, The Social Science Congress at, 750, 789
Legal Education, Reform of, 574
Letheby's, Dr., Paper on the Legislative Measures for Preventing the Adulteration of Food, Drink, and Drugs, 214
Licensing Bill, The, 350
Liverpool, Projected Tunnel under the Mersey at, 890
Local Taxation and Licensing Bills, The Government, 261
Local Weights and Measures used in the Sale of Grain, The, 213
London Corporation, Mr. Secretary Bruce and the, 857
London Parks, 858
London Tramways, 502
Lord Lyttelton and the Endowed Schools, 610
Lord Shaftesbury's Philanthropy, 681
Luggage Despatch System, The American, 461
Markets of London, The, 749
Markets, The City Corporation, 263
Men of Science, The Want of Permanent Provision in England for, 385
Mersey at Liverpool, Projected Tunnel under the, 890
Metropolis, Extension of Street Tramways in the, 825
Metropolis, Increase of Small-Pox in the, 41
Metropolis, Municipal Reform in the, 143
Metropolis, Public Gardens in the, 573
Metropolis Water Bill (No. 2), 611
Metropolitan Building Act, The, 890
Metropolitan Educational Board, The, 142, 179
Metropolitan Fire Brigade and the Burning of Paris, The, 462
Metropolitan Improvements, Recent, 385
Metropolitan Pauperism, 310
Metropolitan School Board, Domestic Economy and the, 538
Metropolitan Sewage, 143
Metropolitan Street Improvements, Projected, 923
Metropolitan Tramway Schemes, 143
Metropolitan Water Debate, The, 425
Metropolitan Water Question, The, 105
Middle-Class Schools in the Metropolis, Proposed Increase of, 923
Mont Cenis Tunnel and the Suez Canal, The, 7
Mont Cenis Tunnel, Opening of the, 719
Municipal Reform in the Metropolis, 143
National Debt, Mr. Candlish's Motion for Paying Off the, 179
National Defences, Lord Derby on our, 40
Need of Good School-Books, 574
Neutrality, The Difficulties of, 8

Newcastle Strike and the Truck System, The, 717
New Courts of Justice, 682
New Forest, The, 502
New Law Court Battle, The, 921
New Social Alliance, Mr. Scott Russell and the, 825, 858
New Thoroughfare in the Metropolis, Projected, 889
Opening of Queen Victoria Street, 826
Opening of the Albert Hall of Art and Science, 262
Opening of the Hamilton Place Exit from Park Lane, 462
Opening of the International Exhibition of 1871, 349
Opening of the Mont Cenis Tunnel, 719
Opening of the New Street from Fleet Street to Holborn, 889
Our Constitutional System on its Trial, 350
Packet Service, The French, 826
Parkes, C. E. Josiah, The late, 647
Parks, The London, 858
Patent Laws, Proposed Reform of the, 177
Patent Laws, The Working of the, 537
Pauperism, Metropolitan, 310
Pavements, Alphalte, 385
Philanthropy, Lord Shaftesbury's, 681
Post-Office Telegraph, The, 141
Post-Office, The Duties of the, 104
Post-Office, The New, 142
Prevention of Cruelty to Animals, The Society for the, 104
Private Bill Legislation, Reform of, 538
Prize Essays and Poems, 104
Progress of Railway Improvements, The, 573
Projected Metropolitan Street Improvements, 923
Projected New Thoroughfare in the Metropolis, 889
Projects for Connecting the Eastern and Midland Stations with Charing Cross, The New, 40
Projects of the Endowed Schools Commissioners, 263
Proposed Increase of Middle-Class Schools in the Metropolis, 923
Proposed Metropolitan Railway Improvement, 890
Public Gardens in the Metropolis, 573
Public-House Regulation Bill, The, 309
Purchase System, The Army Commission, 213
Railway Accidents, 8
Railway Amalgamations, The, 719, 791
Railway Improvement, Proposed Metropolitan, 890
Railway Improvements, The Progress of, 573
Railway Projects, The City, 142
Railway Reforms, 40
Recent Metropolitan Improvements, 385
Recognition of the Honours due to Mr. Bazalgette, Tardy, 609
Reed, Mr. E. J., and his Crotchets, 890
Reform, Army, 143
Reform in the Gold Coinage, 71
Reform of Legal Education, 574
Reform of Private Bill Legislation, 538
Reform of the Patent Laws, Proposed, 177
Rejection of the Metropolitan Board Bill for the Improvement of Shoreditch, 311
Renewal of the Financial Mania, 682
Report of the Vacant City Lands Committee, 262
Reservoirs, Water Storeage, 350
Road Traction-Engines, 214
Robinson, Sir Spencer, and Reed Debate, The, 310
Rome, and on the Selection of Land for Sewage Irrigation, Bailey Denton on the Sanitary Improvement of, 72
Royal Academy Dinner, Speeches at the, 349
Royal Agricultural Exhibition at Wolverhampton, The, 503
Rural Life in England, A French View of, 921
Russell, Mr. Scott, and the New Social Alliance, 825, 858
St. Bride's, Fleet Street, and Spitalfields Slums, 645
St. James's and the Green Parks, Communications through, 215
St. Paul's, The Block around, 8
School Board, Mr. Hepworth Dixon at the, 103
School-Books, Need of Good, 574
Scudamore, Mr., and the Postal Telegraph Department, 890
Sewage, Metropolitan, 143
Sewage, Mr. Bailey Denton's Paper on, 922
Sewage, Utilization, 750
Shaftesbury's, Lord, Philanthropy, 681
Shetland, The Truck System in, 859
Shoreditch, Rejection of the Metropolitan Board Bill for the Improvement of, 311
Shortcomings of the Corporation of the City of London, The, 71
Single-Rail Tramways, 214
Small-Pox Hospital Inquiry, The Hampstead, 791
Small-Pox in the Metropolis, Increase of, 41
Smoking on the Underground Railway, 385
Snow, 8
Social Alliance, Mr. Scott Russell and the New, 825, 858
Social Science Congress at Leeds, 750, 789
Society for the Prevention of Cruelty to Animals, The, 104
Speeches at the Royal Academy Dinner, 349
Suez Canal, The, and the Mont Cenis Tunnel, 7
Switzerland, The Working Classes in, 682
Taylor's, Mr. P. A., Game Bill, 311
Telegraph Department, Mr. Scudamore and the Postal, 890
Telegraph, The Post-Office, 141
Thames Embankment, The North, 501
Thoroughfare in the Metropolis, Projected New, 889
Tontine, The Alexandra Park, 647
Tower Subway, The, 72
Traction-Engines, Road, 214
Tramway Schemes, The Metropolitan, 143
Tramways in the Metropolis, Extension of Street, 825
Tramways, London, 502
Tramways, Single-Rail, 214
Truck System in Shetland, The, 859
Truck System, The Newcastle Strike and the, 717
Truro Borough Contest, The, 682
Tunnelling from Dover to Calais, The Scheme for, 890
Tunnel under the Mersey at Liverpool, Projected, 890
Typhoid Fever in the Palace, 921
Underground Railway, Smoking on the, 385
Utilization of Sewage, 750
Utilization of Sewage, The Edinburgh Reports on the, 683
Vacant City Lands Committee, Report of the, 262
Vagrancy and Pauperism, 718
Val de Travers Asphalte, The, 72
Volunteers, The City of London, 71
Want of Permanent Provision in England for Men of Science, The, 385
Waste Ground around Lambeth Palace, The, 610
Waste Lands, The City, 461
Water Bill (No. 2), The Metropolis, 611
Water Question, The Metropolitan, 105
Water Storeage Reservoirs, 350
Water Supply, The Edinburgh, 574
Water Supply, The Government Bill for Regulating the Metropolitan, 141
Weights and Measures used in the Sale of Grain, Local, The, 213
Wimbledon Common and Hampstead Heath, 142
Woods and Forests, The Bureaucrats of, 501
Working Classes in Switzerland, The, 682
Working of the Patent Laws, The, 537

Leading Articles.

Applications for Provisional Orders under the Gas and Water Facilities Act, 73
Coal Commissioners Report, The, 683
Gas Bills for 1871, 41
Gas Legislation in 1871, 792
Gas Literature in Germany, 47
Metropolis Water Act, The, 1871, 648
Metropolitan Water Supply, Notes on the, 74, 143
Sanitary Commission, The Second Report of the Royal, 215
Ventilation of Sewers, The, 351

Circular to Gas Companies.

Aberdare, The Gas Competition in, 48, 387
Aberdeen Gas Bills, The, 352, 387
Aberdeen, The Gas Question in, 48
Accident at the Wilmslow Gas-Works, 612
Accident to a Gasholder at the Beckton Gas-Works, 180
Accounts of the Metropolis Gas Companies, 1870, 539, 684, 720, 751
Address of the President of the New England Association of Gas Engineers, The, 752
"Advantages of Gas," New Edition of Rutter on the, 861
Alliance and Dublin Consumers Gas Bill, The, 463, 576
Alliance Gas Company and the Dublin Corporation, The, 612
Altrincham, Mr. Rawlinson at, 264
Amalgamation of the Phœnix, South Metropolitan, and Surrey Consumers Gas Companies, Proposed, 612, 860
Amendments of the Sale of Gas Act, Proposed, 75
American Scheme for Converting Tar into Gas, 9
Ammonia, Report of the Gas Referees on, 649
Appeal of the Surrey Consumers Company against an Assessment in Rotherhithe, 145
Applications for Gas Bills and for Provisional Orders, 892
Applications to the Board of Trade under the Gas and Water Works Facilities Bill, The, 76
Assassination of the Manager of the Callao Gas-Works, 106
Audit of the Accounts of the Sheerness Local Board, 539
Award under the Bridgend (Glamorganshire) Gas and Water Act, 1869, 76
Banquet of the City Gas Committee, 797
Beckton Gas-Works, Accident to a Gasholder at the, 180
Beckton Gas-Works, Proposed Increase of the, 924
Beckton Gas-Works, The Drawings of the, 387
Birmingham Gas Company, Alleged Defalcations by the Secretary of the, 539
Birmingham Gas Company, Frauds on the, 720
Birmingham, Reduction of the Price of Gas in, 312
Board of Trade and the Metropolitan Gas Companies, The, 105, 144
Board of Trade Report on the Railway, Tramway, Gas, and Water Bills of the Session, 145
Bolton Gas-Works by the Corporation, Purchase of the, 924
British Association of Gas Managers, The Dublin Meeting of the, 427, 463, 504, 539
Burners, Report of the Metropolitan Gas Referees on, 611
Callao Gas-Works, Assassination of the Manager of, 106
Calvert, Mr. F. C., On the Estimation of Sulphur in Coal and Coke, 649
Carbonic Acid Gas on the Illuminating Power of Coal Gas, Mr. Stimpson's Paper on the Effect of, 352
Catoptric Street Lantern, Skelton's, 752
Chairman of the Sheerness Local Board Again, The, 312
Chartered and Equitable Gas Companies Amendment Bill, The, 387
Chartered Gas Company, Parliamentary Notice of the, 860
City Gas Committee, Banquet of the, 797
Cleland's, Mr., Plan for Exhausting, Forcing, and Washing Gas by Steam, 388
Colombo Gas-Works, 427
Collection of Gas-Rates, 828
Communists, Plunder of the Paris Gas Company by the, 312
Continental Gas Matters, 145
Continental War Notes, 76
Cost of Provisional Orders under the Gas and Water-Works Facilities Act, 860
Cowen, Joseph, Esq., M.P. for Newcastle-on-Tyne, Knighthood of, 892
Daily Telegraph on the Gas Question, The, 181, 312
Dangers Threatening Woolwich Arsenal from the Gasholders at Beckton, The *Echo* on the, 9
Death of Mr. George Rait, 828
Death of Mr. John Maughan, 427

Defalcations by the Secretary of the Birmingham Gas Company, Alleged, 539
De Gayffier, M. Eugène Joseph, 798
Drawings of the Beckton Gas-Works, The, 387
Dublin Corporation, The Alliance Gas Company and the, 612
Dublin Meeting of the British Association of Gas Managers, 427, 463, 504, 539
Echo, The, on the Dangers Threatening Woolwich Arsenal from the Gasholders at Beckton, 9
Economic Gas, Symes's, 923
Economy in Gas Cooking at the London Hospital, 387
Elster on Test Argand Burners, 686
European Gas Company, Report of the, 576
Eveleigh's, Dr., Process of Gas Making, 721, 798, 827
Exhausting, Forcing, and Washing Gas by Steam, Mr. Cleland's Plan for, 388
Explosion at the Leeds Gas-Works, The, 860, 891
Explosion of Gas at Leighton Buzzard, 860
Failure on Standing Orders of the Walsall Improvement Bill, 76
First Step to "Home Rule" in Ireland, The, 145
France, Proposed Gas-Tax in, 649
Frauds on Gas Companies, Prevention of, 797
Frauds on the Birmingham Gas Company, 720
Gas Affairs at Sheerness, 891
Gas and Water Provisional Orders Confirmation Bill, The, 352, 426, 539
Gas and Water Works Facilities Bill, The Applications to the Board of Trade under the, 76
Gas Affairs in Paris, 464
Gas Arbitration at Ryde, 924
Gas Bills for 1871, 47
Gas Competition in Aberdare, 48
Gas Cooking at the London Hospital, Economy in, 387
Gas Examiners, Increase of the Metropolitan, 924
Gas in Jamaica, 798
Gas Legislation in 1871, 797
Gas Lighting in Paris under the Republic, 924
Gas Question at Perth, 105
Gas Question in Aberdeen, The, 48
Gas Rates, Collection of, 828
Gas Referees on Ammonia, Report of the Metropolitan, 649
Gas Referees on Burners, Report of the Metropolitan, 611
Gas Referees, Summer Instructions of the Metropolitan, 265
Gas Referees, Winter Instructions of the Metropolitan, 751
Gas-Tax in France, Proposed, 649
Gas, The Patent, 923
Gas-Works Clauses Act, 1847, Amendment Bill, and Introduction of a New Bill, Withdrawal of the, 311
Gas-Works Clauses Act, 1847, Amendment Bill, The Proposed, 216, 263, 351, 386, 426, 463, 504, 539
Gas-Works in Japan, 798
Glasgow Gas-Meters, 48
Granting of Provisional Orders under the Gas and Water Facilities Act, 1870, 311
Harris *v.* The Commercial Gas Company, The Case of, 387
Hereford Gas-Works by the Corporation, Purchase of the, 924
"Home Rule" in Ireland, The First Step to, 145
Innes's, Mr. P., Prize Essay on the Removal of Impurities from Coal Gas, 721
Insufficiency in the Supply of Gas, Winter Complaints on, 9
Jamaica, Gas in, 798
Japan, Gas-Works in, 798
Judgment of the Court of Queen's Bench in the Case of the Water Company and the Corporation of Sheffield, 463
Knighthood of Joseph Cowen, Esq., M.P. for Newcastle-upon-Tyne, 892
Leeds Gas-Works, The Explosion at the, 860, 891
Legislation in Regard to Test-Burners, 504
Leighton Buzzard, Gas Explosion at, 860
Livesey, Mr. Thomas, 798
Local Government Office Inquiry at Sheerness, 105
Lyons, Strike of Gas Stokers at, 686
M'Ilhenny's "Vacuum Process," 649
Map of the Districts and Stations of the Metropolitan Gas Companies, Wyld's, 352
Maughan, Mr. John, Death of, 427
Meetings of the Metropolitan Gas Companies, 264
Metropolis Gas Companies Accounts, 1870, 539, 684, 740, 751
Metropolis, Reductions in the Price of Gas in the, 751
Metropolitan Board, Mr. Dresser Rogers's Motion at the, 180
Metropolitan Board of Works and the Gas Companies, The, 180
Metropolitan Board of Works, Report of the, 649
Metropolitan Gas Companies, The Board of Trade and the, 105, 144
Metropolitan Gas Examiners, Increase of the, 924
Metropolitan Municipal Association, The, 797
Movements amongst the Gas Operatives for Reducing the Hours of Labour, 860
Municipal Association, The Metropolitan, 797
Municipal Corporations (Borough, &c., Funds) Bill, The, 502, 539, 575, 611, 648
Mutual Assurance Gas Association, 427
New England Association of Gas Engineers, The Address of the President of the, 752
North British Association of Gas Managers, Meeting of the, 649
Oxyhydric Light, The, 828
Paris by Gas, Relighting of, 181
Paris, Gas Affairs in, 464
Paris Gas Company, 686
Paris under the Republic, Gas Lighting in, 924
Parliamentary Notice of the Chartered Gas Company, 860
Parliament, Progress of Gas Bills through, 217, 264
"Patent Gas Company," The, 752
Patent Gas, The, 923
Perth Gas-Works by the Police Commissioners, Ratification of the Purchase of the, 181
Perth, Settlement of the Gas Dispute at, 145
Perth, The Gas Question at, 105
Peterborough Local Board and the Gas Company, The 105
Plunder of the Paris Gas Company by the Communists, 312
Plymouth and Stonehouse Gas Company, Refusal of a Provisional Order to the, 312
Prevention of Frauds on Gas Companies, 797
Price of Gas in the Metropolis, Reduction in the, 751
Price of Gas, Reduction in the, 649
Profits of the Dundee, Glasgow, Leeds, and Manchester Corporation Gas-Works, 752
Progress of Gas Bills through Parliament, 217, 264
Proposed Increase of the Beckton Gas-Works, 924
Provisional Orders Confirmation Bill, The Gas and Water, 352
Provisional Orders Granted to Gas Companies, 828
Provisional Orders under the Gas and Water Facilities Act, Cost of, 860
Provisional Orders under the Gas and Water Facilities Act, Granting of, 311
Purchase of the Bolton and Hereford Gas-Works by the Corporations, 924
Rait, Mr. George, Death of, 828
Ratification of the Purchase of the Perth Gas-Works by the Police Commissioners, 181
Rawlinson, Mr., at Altrincham, 264
Reducing the Hours of Labour, Movement amongst the Gas Operatives for, 860
Reduction in the Price of Gas, 649
Reduction of Price at Wandsworth, 797
Reduction of the Price of Gas in Birmingham, 312
Reductions in the Price of Gas in the Metropolis, 751
Refusal of a Provisional Order to the Plymouth and Stonehouse Gas Company, 312
Refusal of the Local Government Office to Authorize the Loan applied for by the Sheerness Local Board for the Erection of Gas-Works, 217
Refusal of the Provisional Order applied for by the Sheerness Local Board, 181
Refusal of the York Gas Company to Sell their Undertaking to the Corporation, 752
Rejection of the Wandsworth Gas Bill by the Committee of the House of Commons, 504
Relighting of Paris with Gas, 181
Removal of Impurities from Coal Gas, Mr. P. Innes's Prize Essay on, 721
Report of the European Gas Company, 576
Report of the Gas Referees on Ammonia, 649
Report of the Gas Referees on Burners, 611
Report of the Metropolitan Board of Works, 649
Report of the Sheffield United Gas Company, 798
Report of the Standards Commission, The Fifth, 575
Rogers's, Mr. Dresser, Motion at the Metropolitan Board, 180
Rotherham Gas-Works to the Local Board, Transfer of the, 48
Rotherhithe, Appeal of the Surrey Gas Consumers Company against an Assessment in, 145
Rutter on the "Advantages of Gas," New Edition of, 861
Ryde Gas Arbitration, The, 924
St. George's, Hanover Square, The Vestry of, and the Chartered Gas Company, 106
Sale of Gas Act, Proposed Amendment of the, 75
Settlement of the Gas Dispute at Perth, 145
Sheerness, Gas Affairs at, 891
Sheerness Local Board, 145
Sheerness Local Board Again, The Chairman of the, 312
Sheerness Local Board and the Sheppy Gas Bill, The, 387
Sheerness Local Board, Audit of the Accounts of the, 539
Sheerness Local Board for the Erection of Gas Works, Refusal of the Local Government to Authorize the Loan applied for by the, 217
Sheerness Local Board, Refusal of the Provisional Order applied for by the, 181
Sheerness, Local Government Office Inquiry at, 105
Sheffield United Gas Company, Report of the, 798
Sheffield Water Company and the Corporation of Sheffield, The Judgment of the Court of Queen's Bench in the Case of the, 463
Skelton's Catoptric Street Lantern, 752
Standards Commission, The Fifth Report of the, 575
Stimpson's, Mr., Paper on the Effect of Carbonic Acid Gas on the Illuminating Power of Coal Gas, 352
Strike of Gas Stokers at Lyons, 686
Sugg's "Modern Street Lighting," 387
Sulphur in Coal and Coke, Mr. F. C. Calvert on the Estimation of, 649
Summer Instructions of the Metropolitan Gas Referees, 265
Sums to be Raised for Gas Purposes under the Special Acts and Provisional Orders of the past Session, 828
Sunday Labour in Gas-Works, 721
Supply of Gas in London, the *Daily Telegraph* on the, 181, 312
Surrey Gas Consumers Company against an Assessment in Rotherhithe, Appeal of the, 145
Symes' Economic Gas, 923
Tar into Gas, American Scheme for Converting, 9
Test Argand Gas-Burners, Elster on, 686
Test-Burners, Legislation in Regard to, 504
Transfer of the Rotherham Gas-Works to the Local Board, 48
"Vacuum Process," M'Ilhenny's, 649
Walsall Improvement Bill, The, 145
Wandsworth Gas Bill by the Committee of the House of Commons, Rejection of the, 504
Wandsworth, Reduction of Price at, 797
Whitby Improvement Commissioners and the Charges on Opposing the Whitby Gas Bill, 504
Wilmslow Gas-Works, Accident at the, 612
Winter Complaints of Insufficiency in the Supply of Gas, 9
Winter Instructions of the Metropolitan Gas Referees, The, 751
Withdrawal of the Gas-Works Clauses Act, 1847, Amendment Bill, and Introduction of a New Bill, 311
Woolwich Arsenal from the Gasholders at Beckton, The *Echo* on the Dangers Threatening, 9
Wyld's Map of the Metropolitan Gas Companies Districts and Stations, 352
York Gas Company to Sell their Undertaking to the Corporation, Refusal of the, 752

Correspondence.

Anderson, George—Forcing and Washing Gas by Steam, 427
Arnott, John—The Leeds Gas Explosion, 924
Beck, W. H.—The Patent Gas Company, 753
Burners—E. R., 265
Canis, Tobias—The Leeds Gas Explosion, 924
Centre-Valves—Newton, Chambers, and Co., 145
Cleland, Wm.—Exhausting, Washing, and Condensing Gas, 540
Eldridge, James—The Manufacture of Sulphate of Ammonia, 576
Embezzlements on the Birmingham Gas Company—Charles Pridden, 752
Exhauster Governors—Hy. E. Jones, 9
Exhausting and Washing Gas by Steam—H. W. Smith, 464
Exhausting, Washing, and Condensing Gas—Wm. Cleland, 540
Forcing and Washing Gas by Steam—George Anderson, 427
Gas-Flame Denuded of its Impurities—E. Ward-Jackson, 48
Gas Referees Report on Ammonia in Gas—George Livesey, 686
Gas-Works Clauses Act, 1847, Amendment Bill—John Maughan, 353
Hunt, Charles—The Relation of Light to Consumption in Gas-Burners, 427
Income-Tax Assessment of Gas-Works—Magnus Ohren, 924
Jones, Charles Edwin—Sunday Labour in Gas-Works, 753
Jones, Hy. E.—Exhauster Governors, 9
Kennedy, Thos., jun.—Water-Meters, 218
Leeds Gas Explosion, The—John Arnott, 924
Leeds Gas Explosion, The—John Tindall, 892
Leeds Gas Explosion, The—Tobias Canis, 924
Livesey, George—Sunday Labour in Gas-Works, 721
Livesey, George—The Gas Referees on Ammonia in Gas, 686
M'Crae, John—Tar Distilling, 265
Manufacture of Sulphate of Ammonia, The, James Eldridge, 576
Maughan, John—Gas-Works Clauses Act, 1847, Amendment Bill, 353
Metropolitan Gas Accounts—"Keep the Lead," 721
Moon, James—Suggestions for the Safety of Gas-Works, 861
Morton, Robert—Sunday Labour in Gas-Works, 753
Newton, Chambers, and Co.—Centre-Valves, 145
Ohren, Magnus—Income-Tax Assessment of Gas-Works, 924
Paint for Gasholders—A. V. D., 218
Patent Gas Company, The—W. H. Beck, 753
Pole, W.—Relation of Light to Consumption in Gas-Burners, 388
Pole, W.—The Theory of Gas-Burners, 9
Pridden, Charles—Embezzlements on the Birmingham Gas Company, 752
Pridden's, Mr., Letter on the Embezzlements on the Birmingham Gas Company—Edward Sandell, 798
Rating of Gas Works—"Secretary," 892
Relation of Light to Consumption in Gas-Burners—Charles Hunt, 427
Relation of Light to Consumption in Gas-Burners—W. Pole, 388
Sandell, Edward—Mr. Pridden's Letter on the Embezzlements on the Birmingham Gas Company, 798
"Secretary"—Rating of Gas-Works, 892
Smith, H. W.—Exhausting and Washing Gas by Steam, 464
Suggestions for the Safety of Gas-Works—James Moon, 861
Sunday Labour in Gas-Works—Charles Edwin Jones, 753
Sunday Labour in Gas-Works—George Livesey, 721
Sunday Labour in Gas-Works—Robert Morton, 753
Tar Distilling—John M'Crae, 265
Theory of Gas-Burners, The—W. Pole, 9
Tindall, John—The Leeds Gas Explosion, 892
Ward-Jackson, E.—Gas-Flame Denuded of its Impurities, 48
Water-Meters—Thos. Kennedy, jun., 218

Communicated Articles.

Improvement in Gas-Scrubbers, by Mr. W. Mann, 313
Legislation in Regard to Test-Burners, 505
Ratio of Increase of the Illuminating Power of Coal Gas, by Charles Hunt, Esq., F.C.S., Some further Experiments on the, 352

Parliamentary Intelligence.

Aberdare Gas Bill—House of Lords, 223
Aberdeen Corporation Gas Bill—House of Commons, 391
Alliance and Dublin Consumers Gas Bill—House of Commons, 465
Barnet Gas Bill—House of Lords, 314
Batley Corporation Water Bill—House of Commons, 322
Cleveland Water Bill—House of Lords, 354
Edinburgh and District Water Bill—House of Commons, 613, 650, 687
Edinburgh and District Water Bill—House of Lords, 722
Gaslight and Coke Company's Bill—House of Commons, 274, 390
Gas-Works Clauses Act, 1847, Amendment Bill, 218, 541
Huddersfield Improvement Bill—House of Lords, 268
Huddersfield Water-Works Bill—House of Lords, 271
Ince and South Lancashire Water Bill—House of Lords, 389
Municipal Corporations (Borough Funds) Bill, 512
Sheppy Gas Bill—House of Commons, 229
South Lancashire Water Bill—House of Commons, 510
Thirsk Gas Bill—House of Commons, 231
Todmorden Gas Bill—House of Lords, 265
Wandsworth Gas Bill—House of Commons, 508
Wandsworth Gas Bill—House of Lords, 319
Westhoughton Gas Bill—House of Commons, 271
Whitby Gas Bill—House of Commons, 235

Progress of Bills in the House of Commons, 146, 181, 222, 265, 313, 354, 388, 428, 464, 507, 540, 612
Progress of Bills in the House of Lords, 146, 181, 222, 265, 313, 353, 388, 427, 464, 507, 540, 612, 650

Legal Intelligence.

Aberdare Police Court—The New *v.* The Old Company, 403
"Annual Value"—Important Judgment as to the Words, 723
Armagh Assizes—Cochran *v.* Lutton, 585
Atkinson *v.* The Newcastle and Gateshead Water Company, 151
Attorney-General *v.* The Council of the Borough of Birmingham, 182
Bail Court—The Sheffield Water-Works Company *v.* The Corporation of Sheffield, 106
Barlow *v.* Bailey, 357
Birmingham and Staffordshire Gaslight Company *v.* Ratcliff, 357
Bootham *v.* The Mayor and Corporation of Burnley, 585
Charge of Stealing Gas at Manchester, 653
Clerkenwell Police Court—Conviction for Disconnecting a Meter, 78
Cochran *v.* Lutton, 585
Colonial and General Gas Company, Limited, *Re* the, 10
Conviction for Damaging a Street-Lamp, 49
Conviction for Disconnecting a Meter, 78
Court of Chancery—Sawyer *v.* The Peterborough Gas Company, 437
Court of Chancery—The Attorney-General *v.* The Council of the Borough of Birmingham, 182
Court of Chancery—The Grand Junction Canal Company *v.* Thugar and the Tring Local Board of Health, 76
Court of Common Pleas—Liverpool United Gas Company *v.* The Overseers of Everton, 77
Court of Common Pleas—Warren *v.* Wildee, 892.
Court of Exchequer—Krehl and Others, Assignees, *v.* The Great Central Gas Company, 49
Court of Exchequer—The Birmingham and Staffordshire Gas and Light Company *v.* Ratcliff, 357.
Court of General Assessment Sessions for the Metropolis, 77
Court of Queen's Bench—Forman and Wife *v.* The Corporation of Canterbury, 77
Court of Queen's Bench—The Gaslight and Coke Company *v.* The Vestry of St. George's, Hanover Square, 147
Court of Queen's Bench—The Sheffield Water-Works Company *v.* The Corporation of Sheffield, 474
Ellsey and Wife *v.* Phillips, 218
Erdington Petty Sessions—Vaughan *v.* The Birmingham and Staffordshire Gas Company, 753
Forman and Wife *v.* The Corporation of Canterbury, 77
Gaslight and Coke Company *v.* Docking, 582
Gaslight and Coke Company *v.* The Vestry of St. George's, Hanover Square, 147
Grand Junction Canal Company *v.* Thugar and the Tring Local Board of Health
Guildhall Police Court—The Gaslight and Coke Company *v.* Docking, 582
Harris *v.* The Commercial Gas Company, 358
Krehl and Others, Assignees, *v.* The Great Central Gas Company, 49
Lancaster Assizes—Bootham *v.* The Mayor and Corporation of Burnley, 585
Liverpool United Gas Company *v.* The Overseers of Everton, 77
Lowestoft County Court—Important Judgment as to the Meaning of the Words "Annual Value," 723
Manchester City Sessions—Charge of Stealing Gas, 653
New *v.* Old Company, Aberdare, 403
Northern Circuit—Atkinson *v.* The Newcastle and Gateshead Water Company, 151
Phœnix Gas Company *v.* Davis, 512
Rolls Court—Sawyer *v.* Peterborough Gas Company, 10
Rolls Court—Snewing *v.* Watford Local Board of Health, 147
Sawyer *v.* Peterborough Gas Company, 10, 437
Sheffield Water-Works Company *v.* The Corporation of Sheffield, 106, 474
Snewing *v.* Watford Local Board of Health, 147
Southwark Police Court—Phœnix Gas Company *v.* Davis, 512
Sussex County Assizes—Ellsey and Wife *v.* Phillips, 218
Tampering with Pipes of the York Gas Company, 687
Vaughan *v.* The Birmingham and Staffordshire Gas Company, 753
Vice-Chancellor's Court—Barlow *v.* Bailey, 357.
Vice-Chancellor's Court—*Re* The Colonial and General Gas Company, Limited, 10
Vice-Chancellor's Court—Ward *v.* The Wolverhampton Water-Works Company, 864
Vice-Chancellor's Court—Webster *v.* The Corporation of Halifax, 861, 892
Ward *v.* The Wolverhampton Water-Works Company, 864
Warren *v.* Wildee, 892
Webster *v.* The Corporation of Halifax, 861, 892
Westminster Police Court—Conviction for Damaging a Street-Lamp, 49
Whitechapel County Court—Harris *v.* The Commercial Gas Company, 358
York Police Court—Tampering with Pipes of the Gas Company, 687

Meetings of Gas and Water Companies, &c.

Alliance and Dublin Consumers Gas Company, 283, 761
Alum and Ammonia Company, 653
Bahia Gas Company, 362, 829
Berlin Water-Works Company, Limited, 831
Birmingham and Staffordshire Gas Company, 766
Birmingham Gas Company, 763
Birmingham Water-Works Company, 726
Bolton Gas Company, 184
Bombay Gas Company, 476, 925
Brighton Gaslight and Coke Company, 184, 698
Cagliari Gas Company, 241
Cambridge University and Town Gas Company, 619
Canterbury Gas and Water Company, 182
Ceará Gas Company, Limited, 803
Chester Water-Works Company, 653
Commercial Gas Company, 279, 760
Continental Union Gas Company, 359, 829
Crystal Palace District Gas Company, 285, 755

Equitable Gas Company, 107, 364
European Gas Company, 151, 585
Falmouth Gas Company, Limited, 802
Gas-Meter Company, Limited, 766
Hastings and St. Leonards Gas Company, 185, 724
Imperial Continental Gas Association, 439, 897
Imperial Gas Company, 152, 654
Lewes Gas Company, 618
London Gas Company, 328, 800
Malta and Mediterranean Gas Company, 438
Mauritius Gas Company, 363
Nictheroy Gas Company, 361
Oriental Gas Company, 896
Phœnix Gas Company, 277, 754
Ratcliff Gas Company, 155, 697
Rio de Janeiro Gas Company, 284
San Paulo Gas Company, 156
Singapore Gas Company, 360, 831
South Metropolitan Gas Company, 278, 726, 756, 894
Surrey Consumers Gas Company, 327, 799
The Gaslight and Coke Company, 109, 280, 757, 898
Western Gas Company, 110, 653
Wolverhampton Gas Company, 183

Miscellaneous.

A. B. C. Sewage Process at the Leamington Works, The, 242
Accident at the Imperial Gas-Works, 118, 157
Accident at the Maidstone Gas-Works, 276
Accident at Wilmslow Gas-Works, Melancholy, 626
Adulteration of Food, Drinks, and Drugs, Dr. Letheby on Legislative Measures for the Prevention of, 286
Alliance and Dublin Consumers Gas-Works, 900
American Scheme for Producing and Carburetting Hydrogen Gas, 118
Ammonia Engine, An, 866
Ammonia Impurity in Gas, Report to the Board of Trade by the Gas Referees on the, 659
Analyses of the Loch Turret Water, 85
Appointment of Gas Examiner at Beckton, 932
Arbroath Gas Accounts—Burgh Gas Accounts, 837
Ashford Water Supply, The, 289
Assassination of the Manager of the Callao Gas-Works, 118
Bailey's "Albion" A B C or Dial Telegraph, 405
Baillie, Mr. Hugh, Presentation to, 938
Barnsley Gas-Works and the Corporation, The, 901
Batley New Water-Works, 730
Beckton, Gas-Testing House at, 627
Berlin Water-Works Company, 627
Birmingham and Staffordshire Gaslight Company, Report and Balance-Sheet of the, 726
Birmingham, Fatal Explosion of Gas at, 838
Birmingham Gas Company, The, 554
Birmingham Gaslight and Coke Company, Report and Balance-Sheet of the, 725
Birmingham, Serious Gas Explosion at, 158
Birstall Gas-Works, The Purchase of the, 866
Bodkin. Mr. F. E., on Water-Meters, 190
Bolton Town Council, 924
Brighton, Failure of the Water Supply at, 836
Brighton Gas, 242
Brighton Sewers Board, The, 289
Brighton Town Council—The Water Supply, 865, 927
British Association of Gas Managers—
  Election of New Members, 478
  Inaugural Address, by E. White, Esq., Acting President, 478
  Report of the Committee on Sunday Labour in Gas-Works, and the Establishment of a Benevolent Fund, 513
  On the Best Form of Condenser, by W. J. Warner, 514
  On the Cause and Prevention of Choked Ascension-Pipes, by J. Somerville, 515
  On the Benefits Arising from the Use of Exhausters, by Geo. Anderson, 516
  On a New Equilibrium Gas-Governor, by Chas. Hunt, 518
  Visit to the Dublin Gas-Works, 518
  Lecture on the Analysis of Coal Gas, by Dr. Letheby, 546, 588
  On the Apparatus for and Method of Manufacturing Sulphate of Ammonia, suitable for Small Gas-Works, by James Eldridge, 547
  On the Best Form of Carbonizing Accounts, by W. J. Warner, 549
  On Coal Storeage and Spontaneous Combustion of Coals, by A. H. Wood, 549
  On Gas Measurement, by F. W. Hartley, 550
  On Further Experience of Tar Pavement, by Geo. Anderson, 553
  Alteration of Rule 7, 553
  Proposed Amendment of Balloting Paper, 553
  Election of Officers, 553
  Time of Meeting, 554
  Votes of Thanks, 554
Bromley, Public Lighting at, 289
Brussels, Strike of the Lamplighters in, 805
Burners with Reference to the Principles of Gas Illumination, First Report to the Board of Trade by the Gas Referees on the Construction of Gas, 619
Bursting of a Water-Main at Leicester, 627
Callao Gas-Works, Assassination of the Manager of the, 118
Calvert, F. Crace, on the Estimation of Sulphur in Coal and Coke, 654
Cam, The River, 194
Cambridge Gas and Water Companies Treat to their Workmen, 663
Cambridge, The Sewage of, 701, 730, 902
Canterbury, Destruction of Fish at, 331
Carbonic Acid in Illuminating Gas, On the Reduction of Light due to the Presence of—Paper by F. E. Stimpson, 365
Carburetting Hydrogen Gas, American Scheme for Producing and, 118
Cardiff Gas Supply, The, 366
Catoptric Lamp, The Patent, 769
Cheltenham Water-Works Company, 183
Chemistry of Gas Lighting, Some Points in the, by Dr. Odling, F.R.S., 767
Chester, Water Supply at, 656
Cleland's, W., Description of a Direct-Action Method of Exhausting, Forcing, and Washing Gas by Steam, 406
Coal Gas, Sulphur in, 805
Coals, East Indian, 289
Colombo Gas and Water Company, Limited, 587
Conservatory, Gaslight in the, 52, 289
Constant Water Supply, 805
Corporation Charged with Nuisance, A, 805
County and General Gas Consumers Company, 118
Court of Common Council, 800
Cove and Kilcreggan Gas-Works, 838
Crosley, Sir Charles D., Retirement of, 12
Crystal Palace District Gas Company's Treat to their Workmen, 591
Darlington Gas-Works, Strike at the, 901
Darwen, Pollution of the River, 701
Death of the Chairman of the Western Gas Company, 701
Denton, Bailey, on Sewage as a Fertilizer of Land, and Land as a Purifier of Sewage, 933
Destruction of Fish at Canterbury, 331
Destructive Distillation of Light Petroleum Napthas at comparatively Low Temperatures, by S. Dana Hayes, 803
Distilling Tar, 218
Dover, Alleged Gas Nuisance at, 187
Drainage at Oxford, 85
Drainage of Windsor, 117
Dublin Water Supply, The, 769
Dunfermline, 361
Eastbourne Gas Company, 193
East Indian Coals, 289
East London Water-Rates, 866
East London Water-Works Company, 838
Edinburgh, The Water Supply of, 929
Ely, The Sewage Question at, 366
Erie, The Gas Wells of, 367
Exhausting, Forcing, and Washing Gas by Steam, W. Cleland's Description of a Direct-Action Method of, 406
Explosion at a Railway Clearing-House, Fearful, 901
Explosion at Whittlesey, Serious, 838
Explosion of Gas, 730
Explosion of Gas at Birmingham, Fatal, 838
Explosion of Gas at Birmingham, Serious, 158
Explosion of Gas at Leeds, 899
Explosion of Gas at St. John's Wood, 52
Explosion of Gas at Sheffield, 440
Explosion of Gas at Woolwich, 481
Explosion of Gas at Worcester, Mass., Fatal, 52
Failure of the Water Supply at Brighton, 836
Farmer Theorem of Gas-Burners—Note by B. Silliman on Mr. Stimpson's Paper, 78
Fire, Insurance of Gas-Works against, 12
Fish at Canterbury, Destruction of, 331
Forfar, Water Supply of, 837
Foster, William, Notes on Photometry by, 729
French Taxes on Matches and Schist Oils, New, 730
Gas Examiner at Beckton, Appointment of, 932
Gas for Madras, 363
Gas in Rome, 866
Gaslight in the Conservatory, 52, 289
Gas Question at Greetland, The, 866
Gas Question at Halifax, The, 901
Gas Question at Hereford, The, 901
Gas Question at York, The, 901
Gas Referees First Report to the Board of Trade on the Construction of Gas Burners with Reference to the Principles of Gas Illumination, 619
Gas Referees Report to the Board of Trade on the Ammonia Impurity in Gas, 659
Gas Wells, 194
Gas Wells of Erie, The, 367
Gas-Works Clauses Act, 1847, Amendment Bill, Draft Petition against the Second Reading of the, 286
Gas-Works in the War, 85
Glasgow Gas, The, 52
Greetland, The Gas Question at, 866
Halifax, The Gas Question at, 901
Halifax Water Supply, 590
Hayes, S. Dana, on the Destructive Distillation of Light Petroleum Naphthas at comparatively Low Temperatures, 803
Heating by Steam, 832
Heisch, Mr. Chas., On Organic Matter in Water, 11
Hereford Gas-Works by the Corporation, Proposed Purchase of the, 865
Hereford, The Gas Question at, 901
Hollinshead's Patent Recessed Cone Valve, 588
Hong Kong and China Gas Company, Limited, 837
Horsham, Sales of Gas Shares at, 242
Huddersfield New Water-Works, 769
Imperial Gas Works, Accident at the, 118, 157
Improvements in Gas-Scrubbers, 276
Insurance of Gas-Works against Fire, 12
Ipswich Gas-Works—Workmen's Treat, 730
Kidderminster, New Reservoir at, 730
Kilmarnock, Supply of Gas and Water to, 838
Lamplighters in Brussels, Strike of the, 805
Leamington Sewage Works, Opening of the, 800
Leeds, Explosion of Gas at, 899
Leicester, Bursting of a Water-Main at, 627
Letheby, Dr., on Legislative Measures for Preventing the Adulteration of Food, Drinks, and Drugs, 286
Letheby, Dr., on the Quality of the Water Supply to some of the Large Cities and Towns of England and Scotland, 727, 757
Letheby's, Dr., Report on the Gas Supplied to London, 49, 587, 804

Letheby's, Dr., Report Relative to the Quantities of Sulphur Contained in the Gas Supplied to the City, 50
Letheby's, Dr., Report to the Commissioners of Sewers on the Water Supply of London for the Year 1869-70, 156
Letheby's, Dr., Return of the Average Composition and Quality of the Metropolitan Waters, 51
Lighting by Means of Vegetable or Mineral Oils, A. M. Silber on a Method of, 79
Lighting of the Royal Albert Hall, 242
Light, Lecture on, by A. H. Wood, 79
Liverpool Improvement and Water Bill, 366
Livesey, Mr., The late, 804, 901
Loch Turret Water, Analyses of the, 85
London Gas Companies Shares, Sale of, 118
London Gaslight Company's Workmen's Club and Institute, 117, 805
London Gas, Quality of the, 312
Lord Mayor, Portrait of the, 242
Madras, Gas for, 363
Maidstone Gas-Works, Accident at the, 276
Maidstone Water-Works, 193
Manchester Corporation Gas-Works, 833
Manchester District Association of Gas Engineers, Report of the, 188
Manchester, Stealing Gas at, 627
Manchester, Three-Lift Gasholder at, 866
May, Mr. Thomas, Testimonial to, 12
Metropolis Gas Supply—Metropolitan Board of Works, 186
Metropolis Water Supply—
Court of Common Council, 587
Metropolitan Board of Works, 587
Metropolis, Water Supply of the, 242
Metropolitan Board of Works, 481, 512, 544
Metropolitan Board of Works and the Sewage Question, 78
Minster Gas Company, 193
Mont Cenis Tunnel, The, 12
Montrose Gas Company, 901
Newcastle and Gateshead Water-Works, 158
Newcastle-upon-Tyne Gas and Water, 187
New Gas Companies, 830
New Gas Company, 866
New Reservoir at Kidderminster, 730
New Reservoir for Stockport, 366
Nictheroy Gas Company, 118
No Gas, 838, 866
North British Association of Gas Managers—
Election of Officers, 657
President's Address, 657
Report on Prize Papers, by the Committee, 657
The Transfer of Gas-Works from Private Companies to Corporations, by Mr. M'Crae, 657
Lecture on the Relative Value of the Purifying Agents Employed in the Manufacture of Coal Gas, by Dr. Stevenson Macadam, F.R.S.E., 657
On the Removal of Impurities from Coal Gas, by Mr. P. Innes, 698
Nuisance, A Corporation Charged with, 805
Nuisance at Dover, Alleged Gas, 187
Odling, F.R.S., Dr., Some Points in the Chemistry of Gas Lighting, by, 767
Opening of Queen Victoria Street, 837
Opening of the Leamington Sewage-Works, 800
Origin of Albertite and Allied Minerals, F. S. Peckham on the Probable, 50
Ossett, Purchase of the Gas-Works at, 901
Oxford, Drainage at, 85
Paris, The Reign of Terror in, 312
Peckham, F. S., on the Probable Origin of Albertite and Allied Minerals, 50
Perth Gas-Works by the Police Commissioners, Purchase of the, 189
Petition against the Second Reading of the Gas-Works Clauses Act, 1847, Amendment Bill, Draft 286
Photometry, Notes on, by William Foster, 729
Photometry of Coal Gas, by Dr. Wallace, Notes on the Practical, 627
Pollution of the River Darwen, 701
Portrait of the Lord Mayor, 242
Presentation to Mr. Hugh Baillie, 938
Preston, Reduction in the Price of Gas at, 366
Purchase of the Birstall Gas-Works, The, 866
Purchase of the Gas-Works at Ossett, 901
Purchase of the Hereford Gas-Works by the Corporation, Proposed, 865
Quality of the London Gas, 312
Railway Clearing-House, Fearful Explosion at a, 901
Rating Question, The, 194
Rates, East London Water, 866
Reduction in the Price of Gas at Preston, 366
Reid's, J., Paper on Water-Meters, 288
Reign of Terror in Paris, The, 312
Report of the Manchester District Association of Gas Engineers, 188
Retirement of Sir Charles D. Crosley, 12
Return by the Metropolitan Association of Medical Officers of Health of the Average Composition and Quality of the Metropolitan Waters, 11, 117, 288, 366, 440, 518, 627, 701, 769, 837, 901
River Cam, The, 194
Rochdale Gas-Works, Suicide of the Manager of the, 280
Rochester and Chatham Water-Works Company, The, 656
Rome, Gas in, 866
Rotherham Gas-Works to the Local Board, Transfer of the, 49
Royal Albert Hall, Lighting of the, 242
St. John's Wood, Explosion of Gas at, 52
Sale of Gas Shares at Westerham, 289
Sale of London Gas Company's Shares, 118
Sales of Gas Shares at Horsham, 242
Salford, The Gas Profits at, 866
San Paulo Gas Company, 366
Scrubbers, Improvements in Gas, 276
Sevenoaks Water-Works Company, 193
Sewage as a Fertilizer of Land, and Land as a Purifier of Sewage, Bailey Denton on, 933
Sewage of Cambridge, The, 701, 730, 902
Sewage Question at Ely, The, 366
Sewage Question, Metropolitan Board of Works and the, 78
Sewage, Utilization of Thames, 366
Sewage Works at Leamington, Opening of the, 800
Sewers Board at Brighton, The, 289
Shale and Paraffin Oil Trade, The, 730
Sheerness Gas Supply, 110
Sheerness Local Board and the Sheppy Consumers Gas Company, 241, 405
Sheerness Local Board of Health Audit, 545
Sheffield, Explosion of Gas at, 440
Sheffield Water Company, 363
Silber, A. M., on a Method of Lighting by Means of Vegetable or Mineral Oils, 79
Stamford Water Supply, 12
Stealing Gas at Manchester, 627
Steam, Heating by, 832
Stevenson's, Dr., Report on the Gas Supplied by the Imperial Company to St. Pancras, 51, 194, 366, 663, 730, 769, 866, 901
Stimpson's, F. E., Paper on the Reduction of Light due to the Presence of Carbonic Acid in Illuminating Gas, 365
Stockport, New Reservoir for, 366
Stourbridge, 366
Strike at the Darlington Gas-Works, 901
Suicide of the Manager of the Rochdale Gas-Works, 280
Sulphur in Coal and Coke, F. Crace Calvert on the Estimation of, 654
Sulphur in Coal Gas, 805
Supply of Gas at Cardiff, 366
Supply of Gas to Uffculme, Devon, 119, 901
Tar Distilling, 218
Taxes on Matches and Schist Oils, New French, 730
Telegraph, Bailey's "Albion" A B C or Dial, 405
Testimonial to Mr. Thomas May, 12
Testing-House at Beckton, Gas, 627
Three-Lift Gasholder at Manchester, 866
Tonbridge Gas Company, 194
Touting, 157
Transfer of the Rotherham Gas-Works to the Local Board, 49
Tyndall, Professor, on the Water Supply of London, 84
Uffculme, Devon, Supply of Gas to, 119, 901
Utilization of Thames Sewage, 366
Valve, Hollinshead's Patent Recessed Cone, 588
Village Gas Lighting, 12
War, Gas-Works in the, 85
Wallace, Dr., on the Practical Photometry of Coal Gas, 627
Wallasey Local Board, 157
Water Examiner for the Metropolis, 837
Water-Meters, Paper by Mr. F. E. Bodkin on, 190
Water-Meters, Paper by J. Reid on, 288
Water Supply at Brighton, Failure of the, 836
Water Supply at Chester, 656
Water Supply at Halifax, 590
Water Supply at Stamford, 12
Water Supply—Brighton Town Council, 865, 927
Water Supply of Dublin, 769
Water Supply of Edinburgh, 929
Water Supply of Forfax, 837
Water Supply of London, Professor Tyndall on the, 84
Water Supply of the Metropolis, 242
Water Supply, The Ashford, 289
Water-Tanks, Zinc, 366
Water-Works at Huddersfield, New, 769
Water-Works, Newcastle and Gateshead, 158
Westerham, Sale of Gas Shares at, 289
Western Gas Company, Death of the Chairman of the, 701
West Surrey Water Company, 590
Whitmore's, Dr., Report on the Quality of the Gas Supplied in St. Marylebone, 11, 85, 118, 242, 366, 407, 481, 587, 663, 804, 866, 932
Whitmore's, Dr., Report on the Quality of the Water Supplied in St. Marylebone, 11, 85, 118, 242, 366, 408, 481, 587, 663, 805, 866, 932
Whittlesey, Serious Explosion at, 838
Wilmslow Gas-Works, Melancholy Accident at the, 626
Windsor, Drainage of, 117
Wood's, A. H., Lecture on Light, 79
Woolwich, Explosion of Gas at, 481
Worcester, Mass., Fatal Gas Explosion at, 52
Workmen's Club and Institute, London Gaslight Company's, 117, 805
Workmen's Treat—Cambridge Gas and Water Companies, 663
Workmen's Treat—Crystal Palace District Gas Company, 591
Workmen's Treat—Ipswich Gas-Works, 730
York, The Gas Question at, 901
Zinc Water-Tanks, 366

Share List of Metropolitan Gas Companies, 17, 55, 87, 123, 159, 195, 243, 291, 332, 367, 408, 443, 484, 520, 556, 629, 664, 731, 806, 840, 904

Share List of Provincial Gas Companies, 18

Share List of Water Companies, 22

Price Current, 23, 56, 88, 123, 159, 196, 243, 291, 332, 368, 408, 443, 484, 520, 557, 629, 664, 731, 771, 806, 840, 870, 904, 939

Register of New Patents.

Abel, C. D.—Wrought Metal Tubes, 441
Alden, C. W.—Pipe-Wrenches, 158
Allan, J. F.—Illuminating Gas, 902
Anderson, M. F.—Treating Sewage, 12
Atkins, T.—Economizing Waste Gases, 555

Bablon, V.—Regulating Pressure of Gas in Gas-Burners, 158
Baggs, I.—Purifying Coal Gas, 16
Baggs, I.—Manufacture of Carbonate of Ammonia, 55, 121
Baggs, I.—Steam and Gas Engines, 555
Bailey, R.—Ventilating and Heating, 483
Bain, J.—Double-Acting Pumps, 866
Bannehr, Upward, and Dale—Manufacture and Purification of Gas, 14
Barling, T.—Burners, 483
Bartholomew, C.—Treating Sewage, 482
Beck and Whieldon—Cocks and Valves, 54
Bentley and Isham—Purifying Gas, 482
Berry, Jowett, and Wood—Liquid or Fluid Meters, 53
Bischof, G.—Purification of Water, 770
Blackmore, J.—Cisterns, 903
Blair, T. S.—Spiral Pumps, 867, 867
Bobrownicki and Mesnard—Converting Human Excrementinto Fuel and Manure, 119
Bolding, J. L., and J. T., and Titsink—Water-Closets, 869
Bonnett, H.—Water-Closets, 869
Bourne and Kidd—Water-Gauge, 770
Boyle, R.—Ventilators and Smoke Extractors, 903.
Brandon, A. H.—Vapour or Gas Burners, 805
Brash and Young—Illuminating Gas, 121
Bray, Hargraves, and Stubbs—Consuming Smoke, 120
Breeden, J.—Pumps, 290
Breeden, J.—Self-Closing Taps or Valves, 867
Brotherhood and Kittoe—Packing of Joints, 16
Brotherhood and Kittoe—Regulating the Flow of Liquids, 902
Brown, T.—Supplying Steam Generators with Water, 119
Brunton, J.—Meters for Water or other Fluids, 867
Bryant and Culley—Deodorizing and Treating Sewage, 868
Burgh, N. P.—Pumps, 13
Butler and Dunbar—Supplying Coal, &c., to Gas-Retorts, 441
Cashels and Terrace—Manufacture of Gas, 53
Chadburn, C. H. and W.—Liquid Joints, 555
Chameroy, B. H.—Cocks, 194
Chameroy, E. A.—Regulating the Flow of Water, 16
Child and Loader—Liquid-Meters, 12
Chiverton, E.—Lighting Gas-Lamps, 555
Clack, Wilkin, and Scott—Subdividing Particles of Water and other Fluids, 119
Clark, A. M.—Production of Gas, 290
Clayton and Taylor—Gas from Mineral and other Oils, 119
Clayton, T.—Inflammable Gas, 555
Cleland, W.—Exhausting, Forcing, and Purifying Gas, 440
Clemesha and Roberts—High-Pressure Filters, 120
Common, A. A.—Regulating Supply of Water, 54
Cowan, Donaldson, and Sandilands—Dry Gas-Meters, 120
Cowley, W.—Pumping and Forcing Air, 482
Craddock and Ferris—Generating Illuminating Gas, 158
Croll, A. A.—Treatment of Ammoniacal Liquor, 12
Crouzieres, J.—Gas and Water Tight Joint, 289
Culley and Bryant—Deodorizing and Treating Sewage, 868
Dale, Upward, and Bannehr—Manufacture and Purification of Gas, 14
Darwin, S. B.—Hydraulic Main, 869
Defries, D. N.—Gas-Meters, 483
Donaldson, Cowan, and Sandilands—Dry Gas-Meters, 120
Doulton, H.—Stop-Valves, 483
Doulton, H.—Irrigating Conduits, 868
Dufrené, H. A.—Water-Meter, 289
Dwyer, R. D.—Self-Closing Tap, 16
Edwards, E.—Cocks and Valves, 16
Elliott and Higgs—Gas-Regulators, 482
Elliott and Jones—Slide-Valves, 158
Ellis, G. H.—Rotary Engines and Pumps, 121
Ellis, G. H.—Steam, Gas, and Air Engines, 628
Emslie, J. A. and J. T.—Forcing and Conducting Gases, 194
Eskholme and Morris—Regulating the Supply of Water, 903
Everett, R. J.—Utilizing Waste Products, 121
Fennell, J.—Privies, Closets, and Commodes, 121
Fenton and Hollins—Utilization of Sewage, 805
Ferris and Craddock—Generating Illuminating Gas, 158
Firmin, G. J.—Self-Registering Water or Liquid Gauges, 158
Firth, W.—Dressing Cannel Coal, &c., 869
Firth, W.—Steam, Air, Gas, and Fluid Engines, 805
Fletcher, J.—Obtaining Gases and other Products from Coal, 290
Fleury, F. G.—Raising and Forcing Liquids, 52
Forbes and Price—Treatment of Sewage, 119, 122
Ford, T.—Gas-Lamps, 121
Foster, F.—Measuring Fluids, &c., 15
France, T. F.—Baths and Water-Closets, 15
Galloway, W.—Joints or Couplings, 14
Gilbee, W. A.—Water-Meter, 867
Girdlestone, H. J. and J. W.—Dry Closets, &c., 14, 555
Gladstone, T. M.—Chimney-Tops and Ventilators, 555
Gray, T.—Lamps, 555
Green, L. M.—Joints for Pipes, 903
Haigh, I. J. and J., jun.—Water-Closets, 770
Harcourt, A. G. V.—Purification of Gas, 867
Hargreaves, Bray, and Stubbs—Consuming Smoke, 120
Harris, H.—Filtering, 770
Harvey, W.—Cocks, 519
Haseltine, G.—Pressure-Gauges, 555
Hays, J. J.—Utilizing Sewage, 519, 867
Head, F. J.—Cocks and Valves, 838
Heap, J.—Earth-Closets, &c., 13
Heath, W. E.—Gas Pressure-Governors, 85
Heaton, C.—Preventing the Bursting of Water-Pipes, 55
Hahn-Danchell, F. L.—Treating Sewage, 869
Hickmott, J. B.—Manufacture of Gas and Coke, 194
Higgs and Elliott—Gas-Regulators, 482
Hills, F. C.—Manufacture of Gas, 86
Hills, F.—Deodorizing and Disinfecting Compounds, 868
Hind and Wells—Valves, 290
Hockey, J.—Ventilating Lights, 120
Holden, J. J.—Charging and Discharging Gas-Retorts, 119
Holman, S.—Fastening Gas Retort-Lids, 15
Holmes, F.—Pumps, 519
Holt and Woolstenholme—Steam Pumping-Engine, 869
Homersham, W. C.—Pipes and Conduits, 13
Hosken, J.—Controlling the Flow of Liquids, 902
Hubbell, T. B.—Gas-Burner, 52
Hughan, W. H.—Treatment of Nightsoil, 16
Hughes, R. H.—Gas-Regulators, 903
Hunt, B.—Valves, 121
Hunt, B.—Joints for Water and Gas, 441
Hunt, C.—Retorts, 290
Hunt, C.—Equilibrium Gas-Governor, 902
Huntris, Swinburn, and Wilson—Supplying Mines, &c., with Gas, 483
Jennings, J. G.—Sinks, Cisterns, Water-Closets, &c., 903
Jackson, C.—Regulation of the Flow of Gas, 120
Johnson, J. H.—Gas and other Pressure Regulators, 53
Johnson, J. H.—Treatment of Acid Tars, 53
Johnson, J. H.—Production of Oxygen Gas, 85
Johnson, J. H.—Pipe-Joints or Couplings, 628
Johnson, J. H.—Earth-Closets, 868
Johnson, R. T. Y.—Rotary Engines and Pumps, 441
Johnson, W. J.—Condensing Metallic and other Fumes, 482
Johnston, W. O.—Pipes, 483
Jones and Elliott—Slide-Valves, 158
Jones, D.—Manufacture of Coal Gas, 331
Jones, H. J.—Drain-Pipes, 805
Joseph, C.—Filters, 121, 868
Jowett, Berry, and Wood—Liquid or Fluid Meters, 53
Kern and Luçon—Horizontal Pump, 55
Kesterton, H.—Iron Tubes, 482
Kidd and Bourne—Water-Gauge, 770
Kirkpatrick, E. T.—Producing Oxygen Gas, 194
Kittoe and Brotherhood—Packing of Joints, 16
Kittoe and Brotherhood—Regulating the Flow of Liquids, 902
Lacey, T. and S. C.—Stopping the Flow of Gas through a Meter, 519
Lake, W. R.—Metal Tubing, 14
Lake, W. R.—Turbine Water-Wheels, 120
Lake, W. R.—Valve or Stop-Cock, 159
Lake, W. R.—Gas from Liquid Hydrocarbons, 195
Lake, W. R.—Earth-Closets, 867
Lake, W. R.—Gas-Regulating Apparatus, 868
Lane and Porter—Gas for Illumination, 903
Law, H.—Meters for Measuring Fluids, 121
Law, H.—Meters for Measuring Fluids, 289
Law, H.—Supply of Water to Closets, 441
Leachman, W. R.—Raising and Forcing Water, 87
Leoni, S.—Cooking, Heating, and Lighting by Gas, 54
Leoni, S.—Disinfecting, Purifying, &c., by Heated Air, 483
Leopard, J.—Treating Sewage, 86
Lipscombe, J. E.—Filters, &c., 16
Livesey, G. T.—Gasholders and Valves, 13
Lloyd, J. H.—Utilizing and Deodorizing Sewage Matter, 482
Lloyd, T. H.—Valves, 290
Loader and Child—Liquid Meters, 12
Lockerbie and Mason—Utilizing Water Pressure in Raising Liquids, 54
Long, A.—Regulating the Supply of Water, &c., 290
Luçon and Kern—Horizontal Pump, 55
Lundy, J. J.—Deodorization of Sewage, &c., 120
Lungley, C.—Securing Tubes, Taps, &c., 158
Lyon, H.—Indicating and Measuring Quantities, 839
Mann, J. R.—Water-Closets, 87
Marriott, W.—Purification of Gas, 481
Marshall, J. G.—Ventilation, &c., 483
Mason and Lockerbie—Utilizing Water Pressure in Raising Liquids, 54
M'Niel, A.—Salts of Ammonia, 555
M'Niel and Wheaton—Revivifying Materials used for the Purification of Gas, 838
Merfield and Sweetland—Purifying Sewage, 867
Messenger, T. G.—Coupling of Pipes, 869
Mesnard and Bobrownicki—Converting Human Excrement into Fuel and Manure, 119
Mewburn, J. C.—Raising and Flowing Fluids, 120
Mills, R.—Ship and other Pumps, 869
Morley, C. W.—Gas-Burners, 555
Morrell, I. C.—Treatment of Town and Domestic Refuse, 119
Morris and Eskholme—Regulating the Supply of Water, 903
Morrison, J.—Gas-Stoves, 54
Nevill, R.—Retorts, &c., 13
Newsum, G.—Pumping, 13
Newton, A. V.—Meter, 53
Newton, A. V.—Fluid-Meters, 120
Newton, A. V.—Liquid-Meters, 519
Newton, W. E.—Pumps, 121
Newton, W. E.—Earth-Closets, 290
Newton, W. E.—Counting Registers, 482
Newton, W. E.—Manufacture of Gas, 483
Newton, W. E.—Meters for Measuring Liquids, 902
Norton, S.—Valve-Taps, 482
Nunn, W.—Traps for Drains, &c., 868
Olney, T. C.—Gas-Stove, 15
Onion, T.—Measuring the Flow of Water, &c., 770
Ormson, H.—Warming and Ventilating, 289
Palmer, J.—Gas Cooking-Stoves, 158
Parker, J.—Dry-Earth Closets, 121
Parkes, J. J.—Gas-Stoves, 868
Pearn, R. P. and F. K.—Raising and Forcing Fluids, 867
Penn and Hounsell—Curved Metal Pipes, 868
Penn, T.—Cocks, 483
Piercey, H. J. T.—Tube-Cutters and Screw-Stocks, 121
Pitt, R.—Valves, 290
Pocock, A. W.—Water-Meters, Pumps, &c., 441, 518
Pook, W. R.—Ventilating Sewers, 868
Porter and Lane—Gas for Illumination, 903
Potts, W.—Ventilation, 13
Preston and Prestige—Supply of Water to Water-Closets, 12
Preston and Prestige—Preventing Waste of Water, 120

Price and Forbes—Treatment of Sewage, 119, 122
Price, A. P.—Treatment of Sewage, 194
Prince, A.—Generating Gas from Petroleum, &c., 54, 483
Prosser, T. T.—Tube Expander and Cutter, 628
Proud and Skey—Gas Purifiers and Scrubbers, 120
Redfern, H.—Ball-Valves, 482
Reid, J.—Liquid-Meter, 869
Rider, A. K.—Air and Gas Engines, 902
Ripley, A., Pipe-Wrench, 194
Ritchie, C., Utilizing Heat for Warming, 903
Robb, J.—Four-Way Valve Apparatus, 869
Roberts and Clemesha—High-Pressure Filters, 120
Rochussen and Varley—Producing Light and Heat, 53
Ross, W.—Ball-Valves and Floats, 867
Russell, R.—Filters, 869
Sandilands, Cowan, and Donaldson—Dry Gas-Meters, 120
Schad, L.—Treating Human Excrement, 158
Scott, H. Y. D.—Treatment of Sewage, 868
Scott, Wilkin, and Clark—Subdividing Particles of Water and other Fluids, 119
Sheldon, E. P.—Water-Meters, 122
Sherwin and Sutton—Treatment of Sewage Matters, 903
Siemens, C. W.—Regenerative Gas-Furnaces, 440
Silber, A. M.—Lighting and Heating, 519
Skey and Proud—Gas Purifiers and Scrubbers, 120
Sloper and Washer—Treatment of Sewage, 903
Sloper, B. G.—Treatment of Sewage, 441
Small, W. T.—Supply and Exit of Water, &c., 441
Smart, J.—Slide-Valves, 54
Smith, S.—Cocks and Valves, 869
Smith, T. J.—Treating Excremental Matters, 121
Somerville, I.—Pipe-Joints, 867
Southby, E. R.—Distilling Crude Mineral Oils, 120
Spartali, N. D.—Raising and Forcing Fluids, 483
Spear, R.—Pneumatic Engines, 14
Stalvies, J.—Gas-Stoves, 839
Stolipine, A.—Lighting with Legroine Gas, 628
Stubbs, Hargreaves, and Bray—Consuming Smoke, 120
Sutton and Sherwin—Treatment of Sewage Matters, 903
Sweetland and Merfield—Purifying Sewage, 867
Swinburn, Huntriss, and Wilson—Supplying Mines, &c., with Gas, 483
Symes and Young—Manufacturing Gas, 158
Symes, G.—Manufacturing Gas, 838
Tallis, F.—Cocks, 122
Taunton, E. W. P.—Pumps, 483
Taylor and Clayton—Gas from Mineral and other Oils, 119
Terrace and Cathels—Manufacture of Gas, 53
Thomas, G.—Gas-Stoves, 290
Thomson, J. and W.—Ventilation, 54
Thorneloe, G.—Flexible Valves, 52
Titsink and Bolding—Water-Closets, 869
Tylor, A.—Wet and Dry Closets, 628
Upward, Bannehr, and Dale—Manufacture and Purification of Gas, 14
Varley and Rochussen—Producing Light and Heat, 53
Vaughan, G. P. H.—Gas-Engines, 289, 867
Walker, C. C. and W. T.—Centre-Valves, 121
Walker, E.—Gas-Burners, 12
Walker, W.—Pumps, 555
Walker, W.—Steam-Pumps, 903
Walton, T.—Ventilating Rooms and Buildings, 770
Warrington, T. A.—Ventilators, 482
Washer and Sloper—Treatment of Sewage, 903
Waterson, J. P.—Hot Water Apparatus, 902
Weare, R.—Treating Sewage, &c., 194
Webber, C. E.—Forcing Air or Gas through Tubes, 903
Weems, J. and W.—Metallic Pipes and Sheets, 54
Weir, G.—Slide-Valves, 13, 441
Welch, E. J. C.—Apparatus for Using the Lime Light, 120
Wheaton and M'Niel—Revivifying Materials used in the Purification of Gas, 838
Whieldon and Beck—Cocks and Valves, 54
Wiffen, R. A.—Tapping Cock, 120
Wigham, J. R.—Gas-Burners, 15
Wigner, G. W.—Treating and Purifying Sewage, 54, 289
Wilkin, Clark, and Scott—Subdividing Particles of Water and other Fluids, 119
Wilson, Huntriss, and Swinburn—Supplying Mines, &c., with Gas, 483
Wilson, W.—Manufacturing Gas, 441
Winder, C. A.—Drawing and Forcing Air, &c., 120
Wise, W. L.—Igniting Gas, 869
Witthoft, H.—Gas-Burners, 54
Wood, Jowett, and Berry—Liquid or Fluid Meters, 53
Woodward, W. and A.—Retorts, 194
Woolstenholme and Holt—Steam Pumping-Engine, 8 69
Yates, J.—Taps or Stop-Cocks, 289
Young and Brash—Illuminating Gas, 121
Young and Symes—Manufacturing Gas, 158

Ammonia, Carbonate of—I. Baggs, 121
Ammonia, Manufacture of Carbonate of—I. Baggs, 55
Ammonia, Salts of—A. M'Neil, 555
Ammoniacal Liquor, Treatment of—A. A. Croll, 12
Baths and Water-Closets—T. F. France, 15
Burner, Gas—T. B. Hubbell, 52
Burners, Gas—E. Walker, 12
Burners, Gas—J. R. Wigham, 15
Burners, Gas—H. Witthöft, 54
Burners, Gas—C. Joseph, 441
Burners, Gas—T. Barling, 483
Burners, Gas—C. W. Morley, 555
Burners, Gas—A. H. Brandon, 805
Carburetting Gases or Atmospheric Air—B. Hunt, 442
Charging and Discharging Gas-Retorts—J. J. Holden, 119
Charging and Discharging Gas-Retorts—Butler and Dunbar, 441
Cisterns—J. Blackmore, 903
Cocks—F. Tallis, 122
Cocks—B. H. Chameroy, 194
Cocks—T. Penn, 483
Cocks—W. Harvey, 519
Cocks and Valves—E. Edwards, 16
Cocks and Valves—Wheeldon and Beck, 54
Cocks and Valves—F. J. Head, 838
Cocks and Valves—S. Smith, 869
Condensing Metallic and other Fumes—W. J. Johnson, 482
Consuming Smoke—Bray, Hargreaves, and Stubbs, 120
Controlling the Flow of Liquids—J. Hosken, 902
Counting Registers—W. E. Newton, 482
Deodorizing and Disinfecting Compounds—F. Hills, 868
Disinfecting, Purifying, &c., by Heated Air—S. Leoni, 483
Distilling Crude Mineral Oils—E. R. Southby, 120
Drawing and Forcing Air—C. A. Winder, 120
Dressing Cannel Coal—W. Firth, 869
Dry Closets—H. J. and J. W. Girdlestone, 14
Dry Closets—J. W. Girdlestone, 555
Dry-Earth Closets—J. Parker, 121
Earth-Closets—J. Heap, 13
Earth-Closets—W. E. Newton, 290
Earth-Closets—W. R. Lake, 867
Earth-Closets—J. H. Johnson, 868
Economizing Waste Gases—T. Atkins, 555
Engines, Air and Gas—A. K. Rider, 902
Engines, Steam, Air, Gas, and Fluid—W. Firth, 805
Engines, Steam, Gas, and Air—G. H. Ellis, 628
Excremental Matters, Treating—T. J. Smith, 121
Excrement, Treating Human—L. Schad, 158
Exhausting, Forcing, and Purifying Gas—W. Cleland, 440
Fastening Gas-Retort Lids—S. Holman, 15
Filtering—H. Harris, 770
Filters, High-Pressure—Clemesha and Roberts, 120
Filters—J. E. Lipscombe. 16
Filters—C. Joseph, 121
Filters—C. M. Joseph, 868
Filters—R. Russell, 869
Forcing Gas or Air through Tubes—C. E. Webber, 903
Forcing or Conducting Gases—J. A. and J. T. Emslie, 194
Gas and Steam Engines—I. Baggs, 555
Gas-Engines—E. P. H. Vaughan, 289
Gas-Engines—E. P. H. Vaughan, 867
Gas for Illumination—Porter and Lane, 903
Gas from Mineral and other Oils—Clayton and Taylor, 119
Gasholders and Valves—G. T. Livesey, 13
Gauges, Pressure—G. Haseltine, 555
Gauges, Self-Registering Water—G. J. Firmin, 158
Generating Gas from Liquid Hydrocarbons—W. R. Lake, 195
Generating Illuminating Gas—Ferris and Craddock, 158
Governor, Equilibrium Gas—C. Hunt, 902
Governors, Gas Pressure—W. E. Heath, 85
Heating, Cooking, and Lighting by Gas—S. Leoni, 54
Hot Water Apparatus—J. P. Waterson, 902
Hydraulic Main—S. B. Darwin, 869
Igniting Gas—W. L. Wise, 869
Illuminating Gas—Young and Brash, 121
Illuminating Gas—J. F. Allan, 902
Inflammable Gas—T. Clayton, 555
Irrigating Conduits—H. Doulton, 868
Joint for Water, Gas, and Steam Pipes—B. Hunt, 441
Joint, Gas and Water Tight—J. Crouzières, 289
Joints for Pipes—J. Somerville, 867
Joints for Pipes—L. M. Green, 903
Joints, Liquid—C. H. and W. Chadburn, 555
Joints or Couplings—W. Galloway, 14
Joints or Couplings for Pipes—J. H. Johnson, 628
Joints, Packing of—Kittoe and Brotherhood, 16
Lamps, Gas—T. Ford, 121
Lamps—T. Gray, 555
Light and Heat, Producing—Varley and Rochussen, 53
Lighting and Heating—A. M. Silber, 519
Lighting Gas-Lamps—E. Chiverton, 555
Lighting with Legroine Gas—A. Stolipine, 628
Lime-Light, Apparatus for Using the—E. J. C. Welch, 120
Manufacture and Purification of Gas—Upward, Bannehr, and Dale, 14
Manufacture and Purification of Gas—T. Gray, 442
Manufacture of Coal Gas—D. Jones, 331
Manufacture of Gas and Coke—J. B. Hickmott, 194
Manufacture of Gas from Petroleum—A. Prince, 54
Manufacture of Gas—Cathels and Terrace, 53
Manufacture of Gas—F. C. Hills, 87
Manufacture of Gas—W. E. Newton, 483
Manufacturing Gas—Symes and Young, 158
Manufacturing Gas—W. Wilson, 441
Manufacturing Gas—G. Symes, 838
Manure, Converting Human Excrement into Fuel and—Bobrownicki and Mesnard, 119
Measuring and Indicating Quantities—H. Lyon, 839
Measuring Fluids—F. Foster, 15
Measuring the Flow of Water—T. Onion, 770
Meter—A. V. Newton, 53
Meter, Stopping the Flow of Gas through a—T. and S. C. Lacey, 519
Meter, Water—H. A. Dufrené, 289
Meter, Water—W. A. Gilbee, 867
Meters, Dry Gas—Cowan, Donaldson, and Sandilands, 120
Meters, Fluid—A. V. Newton, 120
Meters for Measuring Fluids—H. Law, 121
Meters for Measuring Liquids—W. E. Newton, 902
Meters for Water and other Fluids—J. Brunton, 867
Meters for Water and other Liquids—A. W. Pocock, 518
Meters, Gas—Kromschrœder and Randall, 441
Meters, Gas—D. N. Defries, 483

Meters, Liquid—Loader and Child, 12
Meters, Liquid—A. V. Newton, 519
Meters, Liquid—J. Reid, 869
Meters, Liquid or Fluid—Berry, Jowett, and Wood, 53
Meters, Pumps, &c., Water—A. W. Pocock, 441
Meters, Water—E. P. Sheldon, 122
Mines with Gas, Supplying—Huntriss, Swinburn, and Wilson, 483
Nightsoil, Treatment of—W. H. Hughan, 16
Obtaining Gases and other Products from Coal—J. Fletcher, 290
Obtaining Gas from Petroleum—A. Prince, 483
Oxygen Gas, Producing—E. T. Kirkpatrick, 194
Oxygen Gas, Production of—J. H. Johnson, 85
Pipes and Conduits—W. C. Homersham, 13
Pipes and Sheets, Metallic—J. and W. Weems, 54
Pipes, Clay or Earthenware—R. Miller, 441
Pipes, Coupling of—T. G. Messenger, 869
Pipes, Curved Metal—Penn and Hounsell, 868
Pipes, Drain—H. J. Jones, 805
Pipes, Preventing the Bursting of—C. Heaton, 55
Pipes—W. O. Johnston, 483
Pipe-Wrench—A. Ripley, 194
Pipe-Wrenches—C. W. Alden, 158
Pneumatic Engines—R. Spear, 14
Privies, Closets, and Commodes—J. Fennell, 121
Producing Spray from Water—Wilkin, Clark, and Scott, 119
Production of Gas—A. M. Clark, 290
Pump, Horizontal—Luçon and Kern, 55
Pumping and Forcing Air—W. Cowley, 482
Pumping-Engine—Wolstenholme and Holt, 869
Pumping—G. Newsum, 13
Pumps—N. P. Burgh, 13
Pumps—W. E. Newton, 121
Pumps—J. Breeden, 290
Pumps—E. W. P. Taunton, 483
Pumps—F. Holmes, 519
Pumps—W. Walker, 555
Pumps, Double-Acting—J. Bain, 866
Pumps, Ship and other—R. Mills, 869
Pumps, Spiral—T. S. Blair, 867, 867
Pumps, Steam—W. Walker, 903
Purification of Gas—A. V. Harcourt, 867
Purification of Gas, Iron Salts or Compounds for the—W. Marriott, 481
Purification of Water—G. Bischof, 770
Purifiers and Scrubbers, Gas—Skey and Proud, 120
Purifying Coal Gas—I. Baggs, 16
Purifying Gas—Bentley and Isham, 482
Raising and Forcing Fluids—J. C. Mewburn, 120
Raising and Forcing Fluids—N. D. Spartali, 483
Raising and Forcing Fluids—R. P. and F. K. Pearn, 867
Raising and Forcing Liquids—F. G. Fleury, 52
Raising and Forcing Water—W. R. Leachman, 87
Raising Liquids by Water Pressure—Mason and Lockerbie, 54
Refuse, Treatment of Towm and Domestic—J. C. Morrell, 119
Regenerative Gas-Furnaces—C. W. Siemens, 440
Regulating and Measuring the Flow of Liquids—Kitto and Brotherhood, 902
Regulating Apparatus for Gas—W. R. Lake, 868
Regulating Pressure of Gas in Gas-Burners—V. Balbon, 158
Regulating the Flow of Water—E. A. Chameroy, 16
Regulating the Supply of Water—A. A. Common, 54
Regulating the Supply of Water, &c.—A. Long, 290
Regulating the Supply of Water—Morris and Eskholme, 903
Regulation of the Flow of Gas—C. Jackson, 120
Regulators, Gas and other Pressure—J. H. Johnson, 53
Regulators, Gas—Elliott and Higgs, 482
Regulators, Gas—R. H. Hughes, 903
Retorts—W. and A. Woodward, 194
Retorts—C. Hunt, 290
Retorts, &c.—R. Nevill, 13
Revivifying Materials used for the Purification of Gas—M'Niel and Wheaton, 838
Rotary Engines and Pumps—G. H. Ellis, 121
Rotary Engines and Pumps—R. T. Y. Johnson, 441
Sewage, Deodorization of—J. J. Lundy, 120
Sewage, Deodorizing and Purifying—G. W. Wigner, 289
Sewage, Deodorizing and Treating—Bryant and Culley, 868
Sewage Matters, Treatment of—Sherwin and Sutton, 903
Sewage Matter, Utilizing and Deodorizing—J. H. Lloyd, 482
Sewage, Purifying—Sweetland and Merfield, 867
Sewage, Treating and Deodorizing—J. J. Hayes, 867
Sewage, Treating and Purifying—G. W. Wigner, 54
Sewage, Treating—M. F. Anderson, 12
Sewage, Treating—J. Leopard, 86
Sewage, Treating—Forbes and Price, 119
Sewage, Treating—R. Weare, 194
Sewage, Treating—C. Bartholomew, 482
Sewage, Treating—F. L. Hahn-Danchell, 869
Sewage, Treatment of—Forbes and Price, 122
Sewage, Treatment of—A. P. Price, 194
Sewage, Treatment of—B. G. Sloper, 441
Sewage, Treatment of—P. Spence, 442
Sewage, Treatment of—H. Y. D. Scott, 868
Sewage, Treatment of—Sloper and Washer, 903
Sewage, Utilization of—Fenton and Hollins, 805
Sewage, Utilizing—J. J. Hays, 519
Sinks, Cisterns, Water-Closets, &c.—J. G. Jennings, 903
Stove, Gas—L. C. Olney, 15
Stoves, Gas—J. Morrison, 54
Stoves, Gas—G. Thomas, 290
Stoves, Gas—J. Stalvies, 839
Stoves, Gas—J. J. Parker, 868
Stoves, Gas Cooking—J. Palmer, 158
Tap, Filter, and Double Valve—S. Norton, 442
Tap, Self-Closing—R. D. Dwyer, 16
Tapping Cock—R. A. Wiffen, 120
Taps and Valves, Self-Closing—J. Breeden, 867
Taps or Stop-Cocks—J. Yates, 289
Tars, Treatment of Acid—J. H. Johnson, 53
Traps for Drains—W. Nunn, 868
Tube-Cutters and Screw-Stocks—H. J. T. Piercy, 121
Tube Expander and Cutter—T. T. Prosser, 628
Tubes, Iron—H. Kesterton, 482
Tubes—A. J. Stewart, 442
Tubes, Taps, &c., Securing—C. Lungley, 158
Tubes, Wrought Metal—C. D. Abel, 441
Turbine Water-Wheels—W. R. Lake, 120
Tubing, Metal—W. R. Lake, 14
Utilizing Heat for Warming, &c.—C. Ritchie, 903
Utilizing Waste Gas Products—R. J. Everett, 121
Valve, Four-Way—J. Robb, 869
Valve or Stop-Cock—W. R. Lake, 159
Valve-Taps—S. Norton, 482
Valves—B. Hunt, 121
Valves—Hind and Wells, 290
Valves—R. Pitt, 290
Valves—T. H. Lloyd, 290
Valves—D. Rowan, 442
Valves—T. C. Brown, 442
Valves and Floats, Ball—W. Ross, 867
Valves and Gasholders—G. T. Livesey, 13
Valves, Ball—H. Redfern, 482
Valves, Centre—C. C. and W. T. Walker, 121
Valves, Flexible—G. Thorneloe, 52
Valves, Slide—G. Weir, 13, 441
Valves, Slide—J. Smart, 54
Valves, Slide—Jones and Elliott, 158
Valves, Stop—H. Doulton, 483
Ventilating and Heating—R. Bailey, 483
Ventilating and Warming—H. Ormson, 289
Ventilating Lights—J. Hockey, 120
Ventilating Rooms and Buildings—T. Walton, 770
Ventilating Sewers—W. R. Pook, 868
Ventilation—W. Potts, 13
Ventilation—J. and W. Thomson, 54
Ventilation, &c.—J. G. Marshall, 483
Ventilators—T. A. Warrington, 482
Ventilators and Smoke Extractors—R. Boyle, 903
Ventilators, Chimney-Tops, &c.—T. M. Gladstone, 555
Water-Closets—J. R. Mann, 87
Water-Closets—I. J. and I. Haigh—770
Water-Closets—Bolding and Titsink, 869
Water-Closets—H. Bonnett, 869
Water-Closets, Supplying of Water to—Preston and Prestige, 12
Water-Closets, Supply of Water to—H. Law, 441
Water-Gauge—Kidd and Bourne, 770
Water, Preventing Waste of—Preston and Prestige, 120
Water, Supply and Exit of—W. T. Small, 441
Water, Supplying Steam-Generators with—T. Brown, 119
Wet and Dry Closets—A. Tylor, 628

Applications for Letters Patent, 16, 55, 87, 122, 159, 195, 243, 290, 331, 367, 404, 442, 483, 519, 556, 628, 663, 701, 730, 770, 805, 839, 870, 903

Application for Prolongation of Patent, 17, 556

Grants of Provisional Protection, 16, 55, 87, 122, 159, 195, 243, 291, 331, 367, 404, 442, 483, 519, 556, 628, 629, 663, 701, 730, 770, 806, 839, 870, 904

Inventions Protected for Six Months by the Deposit of a Complete Specification, 87, 291, 484, 629, 770, 839

Notices to Proceed, 16, 55, 87, 123, 159, 195, 243, 291, 331, 367, 404, 442, 484, 519, 556, 663, 702, 730, 771, 806, 839, 870, 904

Patents which have become Void, 17, 55, 87, 123, 159, 291, 332, 404, 443, 484, 519, 556, 629, 664, 771, 806, 839, 870, 904